

Idaho Water Quality Standards (WQS): A Quick Review

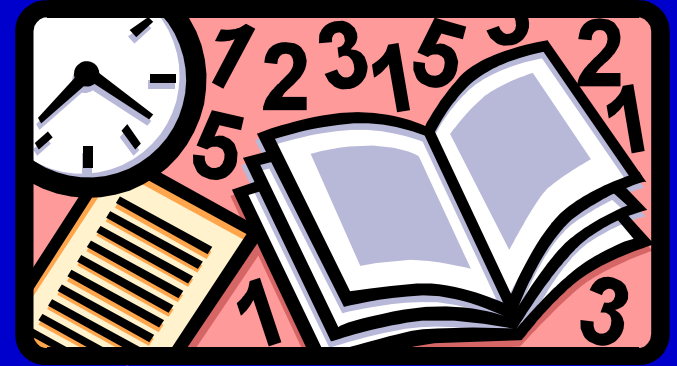


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**UAA Workshop
November 2004**

Purpose



- ✓ Required elements of WQS
- ✓ Clean Water Act drivers
- ✓ Designating uses and setting criteria
- ✓ EPA & State relationship

WQS Elements

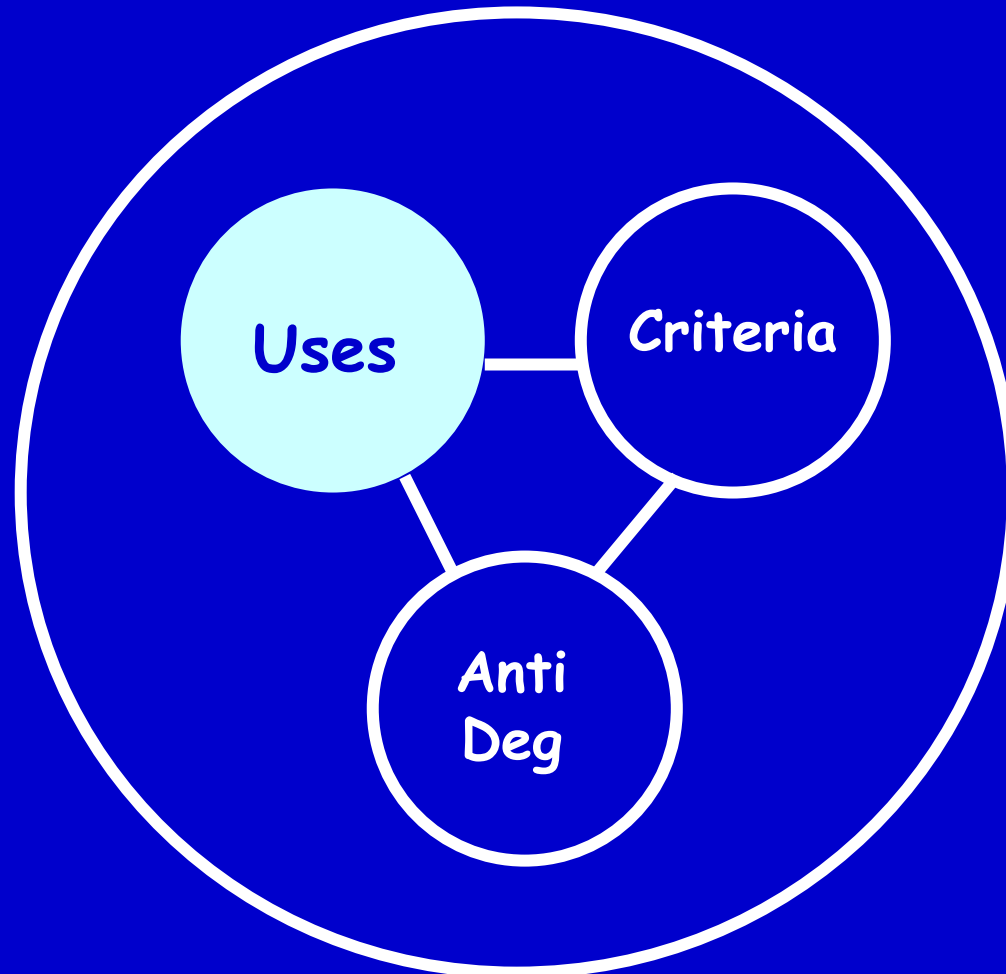
- Required &
 - Uses
 - Criteria
 - Antidegradation
- Optional
 - Mixing Zones
 - Low Flows
 - Variances
 - and more ...



IDAHO WQS

Required Elements

WQS



Existing vs. Designated Uses

- Existing Uses - those uses attained in a waterbody on or after 11/28/75, whether or not they are included in the WQS. Must protect existing uses.
- Designated Uses - those uses specified in state or tribal WQS regulations for each water body or segment, whether or not they are being attained. Goals of the waterbody.

Categories and Subcategories of Uses

CWA Section	Translation	Examples of Categories/ Subcategories
<i>CWA 101(a): requires, where attainable, water quality providing for the protection and propagation of fish, shellfish and wildlife, and recreation in and on the water</i>	Federally Required: ✓ "Fishable" = aquatic life ✓ "Swimmable" = Recreation in and on the water	Aquatic life: cold water, seasonal cold, warm water, modified Recreation: primary and secondary contact recreation
<i>CWA 303 (c)(2)(a): consider the use and value for public water supplies, propagation of fish and wildlife, recreational, agricultural, industrial and other purposes</i>	State discretion: ✓ Public water supply ✓ Agriculture ✓ Industry ✓ Navigation ✓ Others	Public water supply: domestic, industrial, and agricultural

Presumed Uses in Idaho

Section 101

- Presumptive Use - undesignated waters are presumed to support cold water aquatic life and primary or secondary contact recreation until formally designated
- Based on EPA's "rebuttable presumption" that fishable/swimmable uses can be attained unless justified otherwise

Aquatic Life Uses

Section 100.01

1. Cold water

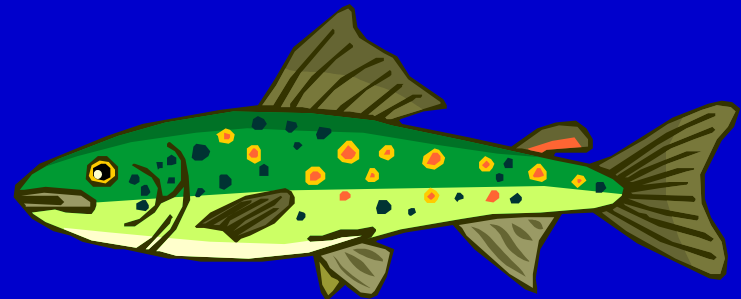
- Salmonid spawning
- Bull trout

2. Seasonal cold water

3. Warm water

4. Modified

- Situations in which water can not meet expectations of other categories due to any of the six reasons given in 131.10(g)
- No set criteria -- criteria must be developed for each case of modified aquatic life.



Recreation Uses

Section 100.02

1. Primary Contact (PCR)
2. Secondary Contact (SCR)

The difference is the likelihood of incidentally ingesting water based on whether immersion is expected during recreation or not

3. Public Swimming Beach



Water Supply Uses

Section 100.03

1. Domestic
2. Industrial
3. Agricultural



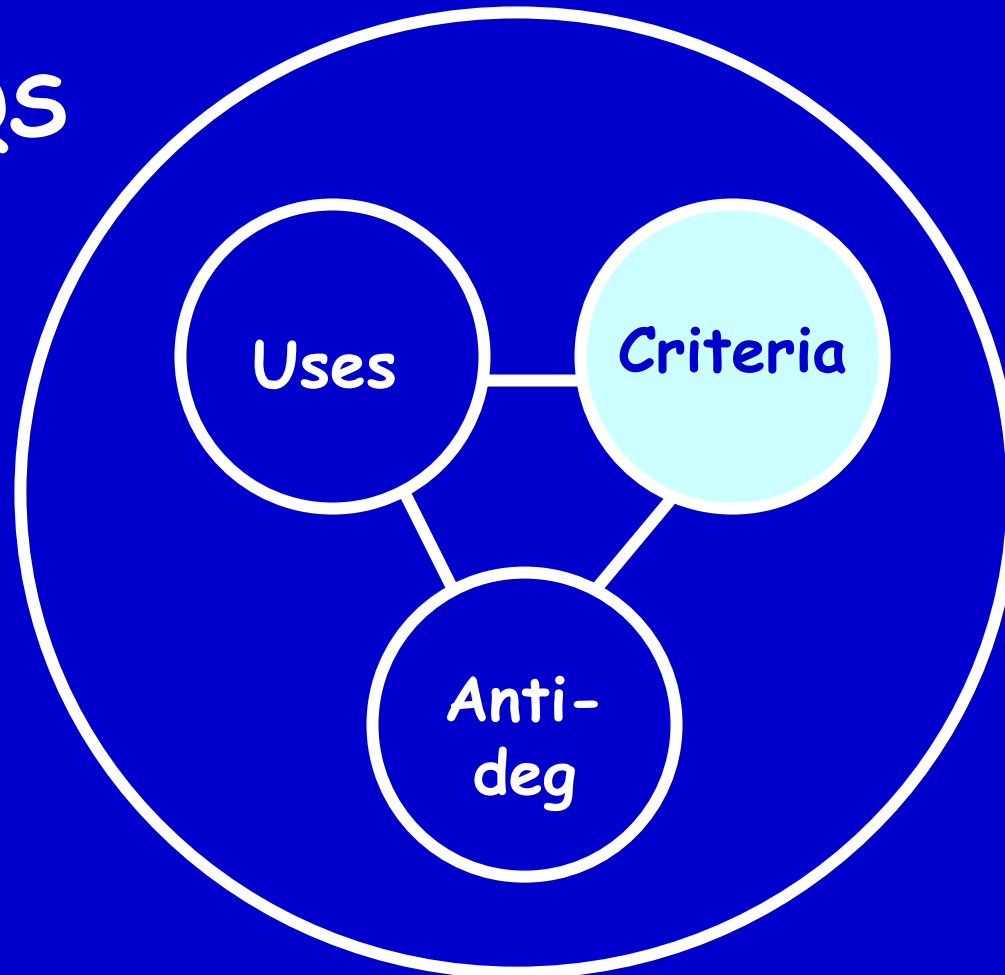
Designation of Uses



- Aquatic life, domestic water supply, and recreation are specifically designated
- Industrial and agricultural water supply, aesthetics, and wildlife habitat generally apply to all waters
- Specific designation requires rulemaking

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WQS



Protect Designated Uses Through Criteria

- States must adopt criteria that protect the designated use
 - Must be based on sound science
 - Must have sufficient parameters or constituents to protect the designated use

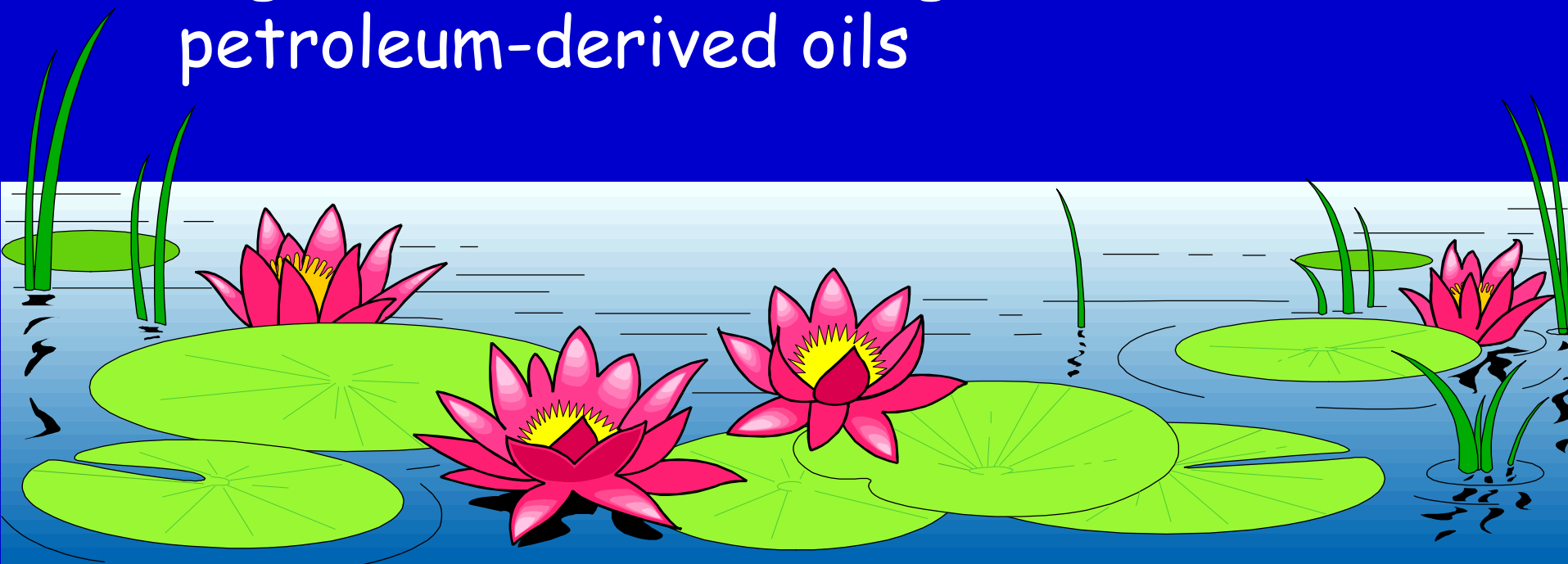
See 40 CFR 131.11

Numeric vs. Narrative

- **Narrative Criteria** are general statements describing desired conditions of water quality
- **Numeric Criteria** are based on:
 - 304(a) guidance modified to reflect site-specific conditions, or
 - 304(a) guidance, or
 - Other scientifically defensible methods

Narrative Criterion Example

- Surface waters shall be virtually free from floating non-petroleum oils of vegetable or animal origin, as well as petroleum-derived oils

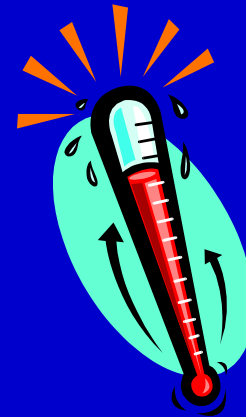


Numeric Criterion Example

Cold water aquatic life temperature criteria:

A daily maximum $< 22^{\circ}\text{C}$

A maximum daily average $< 19^{\circ}\text{C}$



General Water Quality Criteria

Section 200

- Apply to all surface water regardless of use
- Typically narrative, "free from" statements except for natural background
- Require interpretation on a case-by-case basis (e.g. Water Body Assessment Guidance for nutrients and sediments)

Use-Specific Criteria

Sections 210, 250-253

- All other criteria are numeric and use specific
- Most numeric criteria are more than just a concentration - most have a duration and frequency component as well as a magnitude

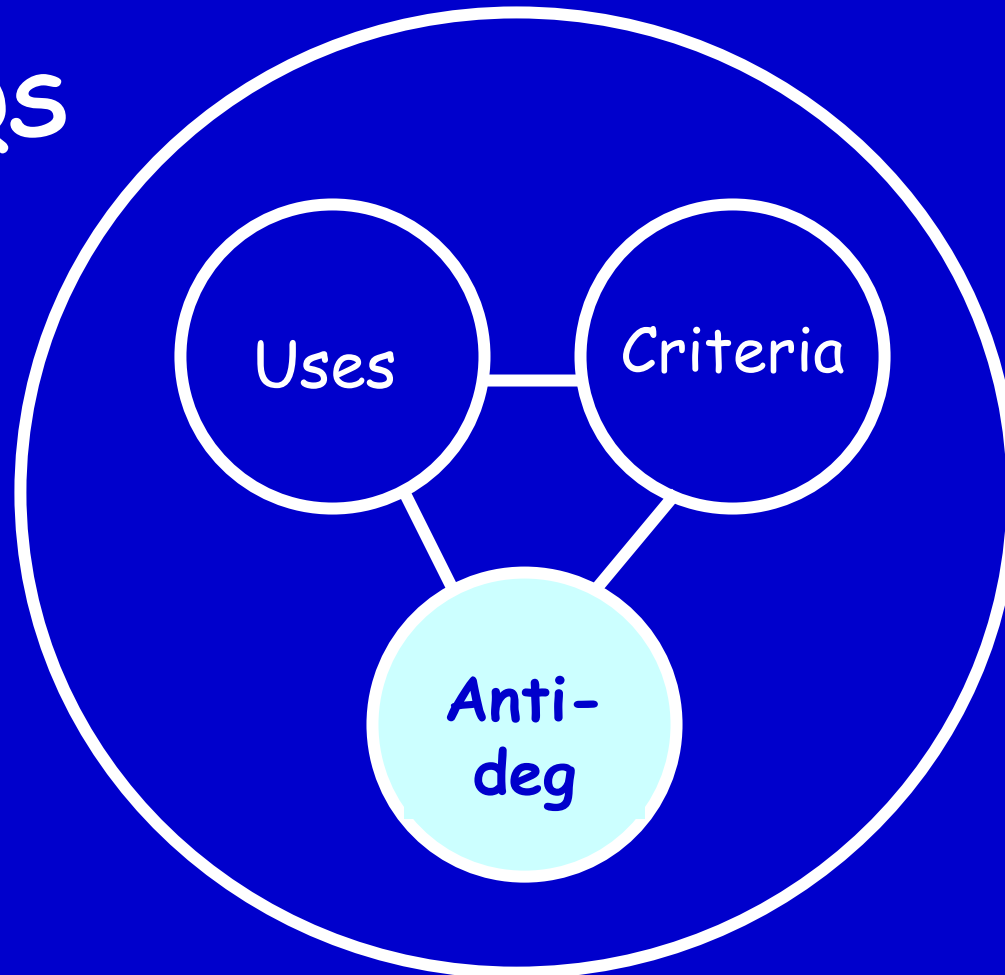
Different Criteria

Parameter and its criterion value

	Mercury	Dissolved Oxygen	Bacteria
Recreation	$< 0.15 \mu\text{g/L}$	NA	E. Coli $< 126/100 \text{ ml}$
Aquatic Life	$< 1.4 \mu\text{g/L}$ or $< 0.77 \mu\text{g/L}$	$> 6.0 \text{ mg/L}$	NA
Domestic Water Supply	$< 0.14 \mu\text{g/L}$	NA	NA

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WQS



CWA Antidegradation Policy

- Protects existing uses
- Allows water quality that **exceeds** “fishable/swimmable” to be lowered **by regulated activities** only in certain prescribed conditions and after some type of **public review**
- Protects waters of national significance

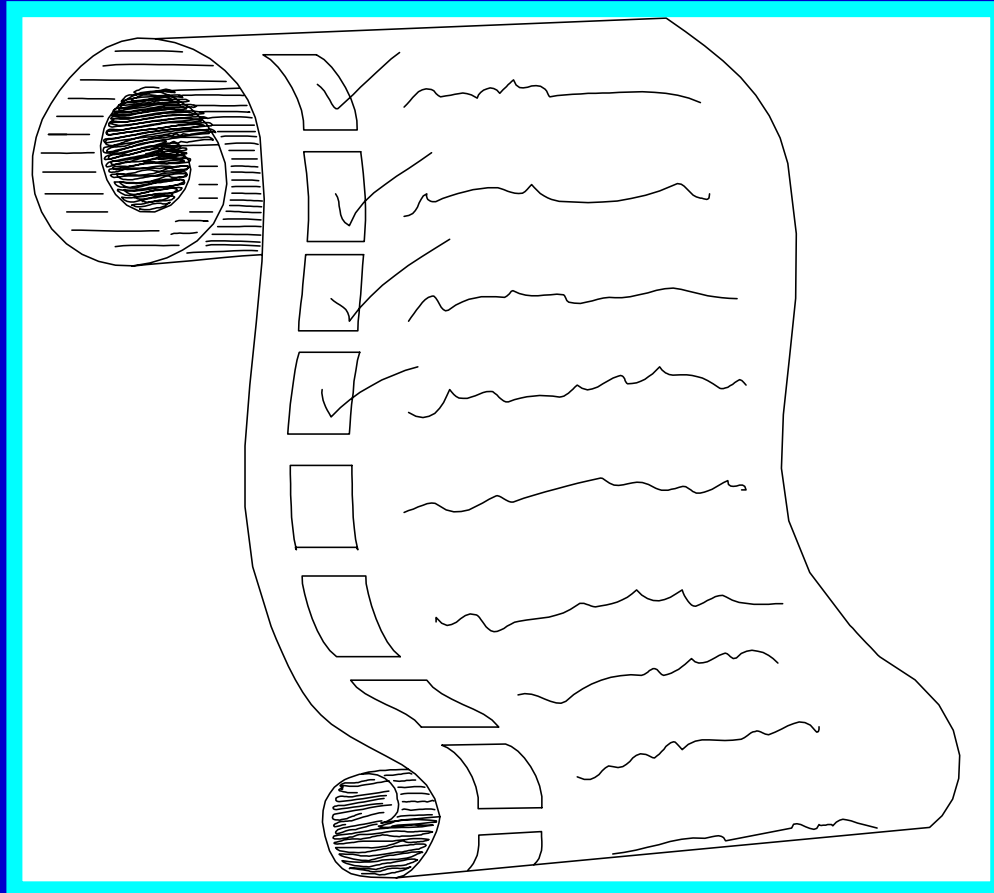
Policy

IDAPA 58.01.02.51.

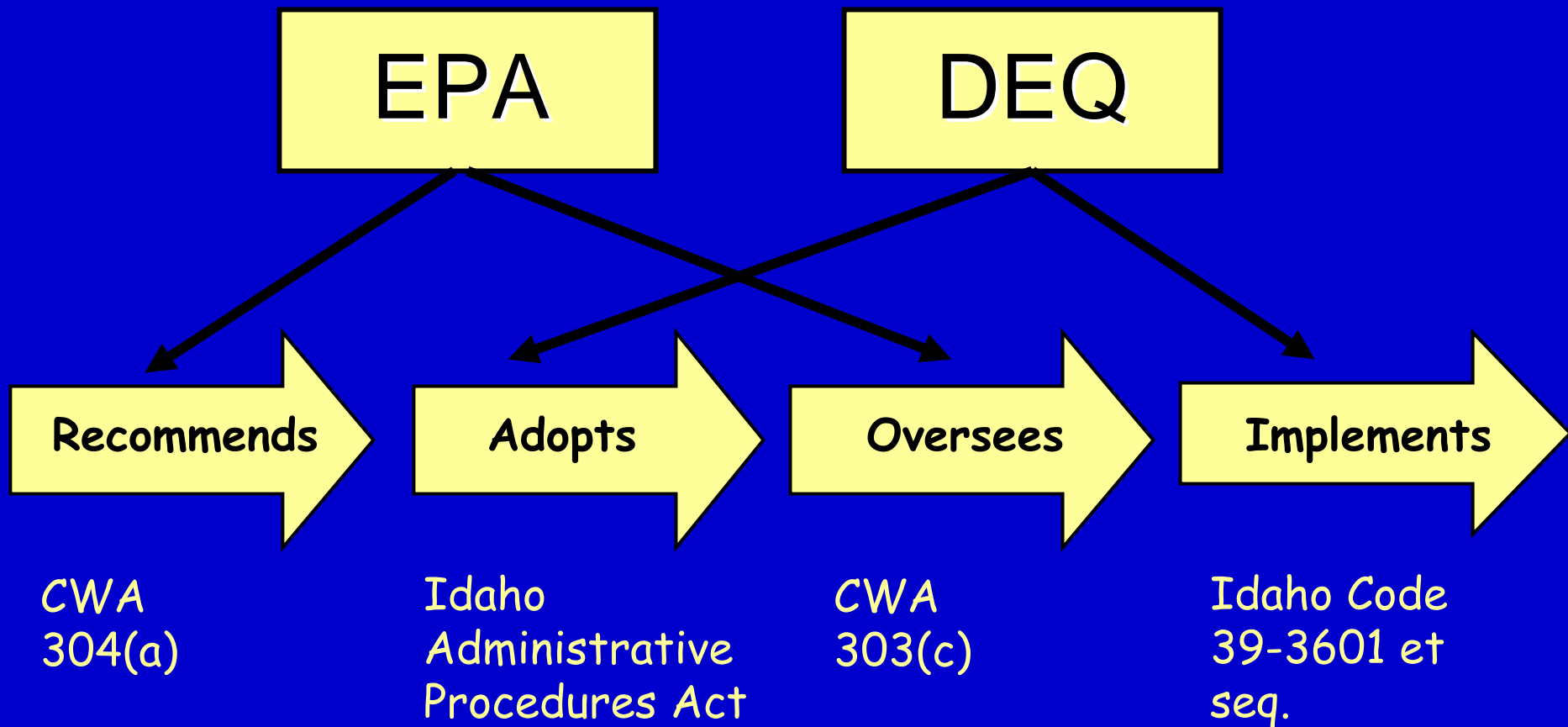


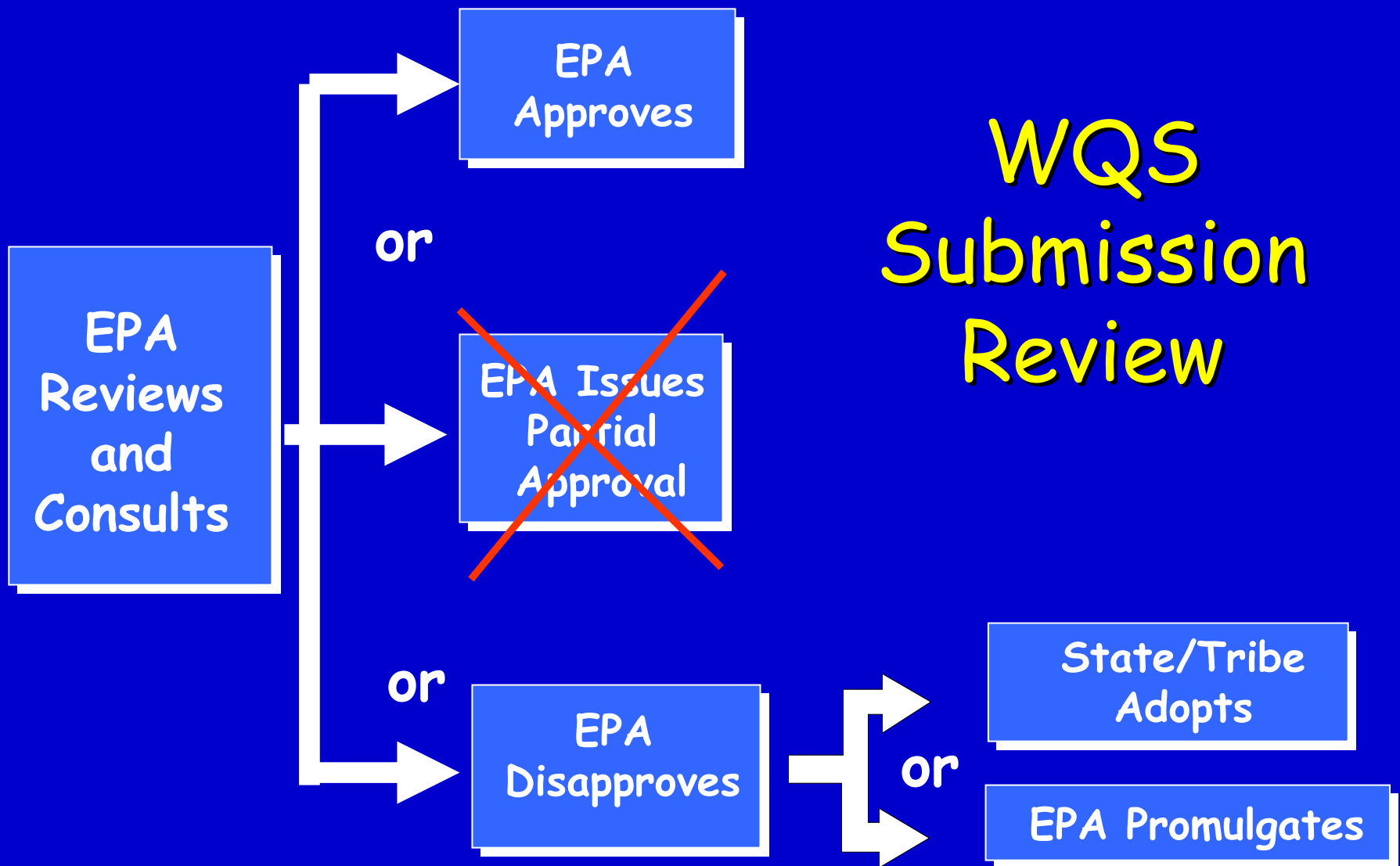
- State policy resembles federal language
 - Maintenance Of Existing Uses For All Waters (.01)
 - High Quality Waters (.02)
 - Outstanding Resource Waters (.03)

Process



The EPA/DEQ WQS Partnership Flowchart





Timeline for ID WQS Development/Review

State Development
Process

8 months minimum

EPA Review Process

0.5 - 2 years

State
/Tribe
Begins

Stakeholder
Advisory
Committees

Public
Hearing/
Comment

State/Tribe
Adopts
WQS Rule

State/Tribe
Submits
WQS to EPA

EPA May Do
Biological
Assessment

EPA
Approves or
Disapproves
(timeframe
varies)

Consultation
with
Services

Timeline for WQS Development/Review

"Alaska Rule" amended
40 CFR 131.21

After May 30, 2000 state
adopted WQS not
effective for CWA
purposes until EPA
approves them



More
Consultation
with
Services



EPA
Approves
Modified
Action

Use Attainability Analysis

The Route to Changing a Use

***THIS LANGUAGE:** CWA 101(a)(2): "it is the national goal that wherever attainable, ... water quality which provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water ..."*

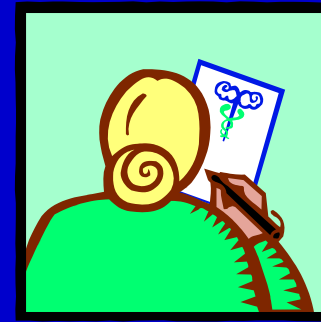
....YIELDS: 40 CFR 131.10(g-k)



What is a Use Attainability Analysis

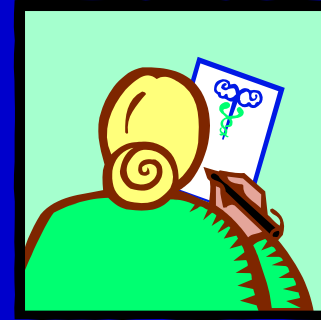
A Use Attainability Analysis (UAA) is a structured, scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological and economic factors (based on natural, human-caused, social or economic conditions)

Key Messages



- Parts of WQS are required, others are the state's prerogative
- States/tribes designate uses for their waters
- Criteria are use dependent
- Existing uses must be protected; can not change existing uses

Key Messages



- State has primacy for WQS, while EPA reviews and provides criteria recommendations
- Designating a use requires rulemaking and final EPA approval
- WQS are ever changing; the most current version is available on the web.

IDAHO WQS



- Codified as:
 - IDAPA 58.01.02 - Water Quality Standards and Wastewater Treatment Requirements

- Web site...

Most Current

<http://www2.state.id.us/adm/adminrules/rules/idapa58/0102.pdf>

